

AMENDMENTS

In the Claims

The following is a marked-up version of the claims with the language that is underlined ("____") being added and the language that contains strikethrough ("—") being deleted:

1. (Currently Amended) A method for preventing data entry via a data input screen on a client device, comprising:

rendering rendering, by the client device, source code that defines the data input screen in the client device;

defining an executable script within the source code; and

executing the executable script in response to user input,

wherein the executable script operates within the client device to render the data input screen inaccessible during processing of the user input to prevent duplicative execution of the executable script from subsequent user input, wherein upon completion of processing of the user input, the executable script renders the data input screen accessible;

wherein executing further comprises:

associating the executable script with a predetermined z-index number for a web page; and

rendering inaccessible those data entry elements associated with the web page that have a z-index number lower than the predetermined z-index number.

2. (Previously Presented) The method as recited in claim 1, wherein the source code comprises a tag-based language.

3. (Previously Presented) The method as recited in claim 2, wherein the source code defines a membrane layer at a higher z-index level than other Web page elements, and executing the executable script further comprises changing a visibility attribute of the membrane layer.

4. (Previously Presented) The method as recited in claim 1, wherein the data input screen is received from a remote server and executing the executable script is preformed solely on the client device without any further processing by the remote server.

5. (Previously Presented) An apparatus for preventing entries or submissions of data via an input screen displayed on a client device, comprising:

a central processing unit;

a memory;

a user input device;

a display; and

a browser adapted to render the input screen on the display,

wherein source code is provided to the browser that contains instructions that are interpreted by the browser to render the input screen inaccessible after an executable script contained within source code is executed on the client device to prevent duplicative execution of the executable script from subsequent user input, wherein the input screen is rendered accessible after execution of the executable script,

wherein the source code further contains instructions which operate to:

generate association of the executable script with a predetermined z-index number for a web page; and

render inaccessible those data entry elements associated with the web page that have a z-index number lower than the predetermined z-index number.

6. (Previously Presented) The apparatus as defined in claim 5, wherein the executable code is executed in response to user input.

7. (Previously Presented) The apparatus as defined in claim 5, wherein the source code is a tag-based language.

8. (Previously Presented) The apparatus as defined in claim 5, wherein the source code defines a membrane, and wherein a visibility attribute of the membrane is changed by the executable script.

9. (Previously Presented) The apparatus as defined in claim 8, wherein the membrane is defined as layer in a cascading style sheet web page.

10. (Previously Presented) A computer-readable medium having computer-executable components comprising:

a form definition component defining a data input screen and a data submission field;

a style definition component defining a layer having a width and height at least as large as the data submission field;

a function definition component responsive to the data submission field, wherein upon execution of the function definition component, the layer operates to render the data submission field inaccessible on the form during execution of the function definition component, wherein the data submission field is rendered accessible upon completion of execution of the function definition component,

wherein the computer-executable components are operable to perform the following:

associating the executable script with a predetermined z-index number for a web page, and

rendering inaccessible those data entry elements associated with the web page that have a z-index number lower than the predetermined z-index number.

11. (Previously Presented) The computer-readable medium having computer-executable components as recited in claim 10, wherein the layer is initially defined as hidden, and is made visible upon execution of the function definition.

12. (Previously Presented) The computer-readable medium having computer-executable components as recited in claim 11, wherein the layer comprises one of plural layers in a cascading style sheet web page.

13. (Previously Presented) The computer-readable medium having computer-executable components as recited in claim 10, wherein the function definition component is executed in response to user operation of the data submission field.

14. (Previously Presented) The computer-readable medium having computer-executable components as recited in claim 10 wherein the function definition component is executed solely within a client device to prevent subsequent data entry via the data input screen.

15. (Previously Presented) A method for preventing data entry to a server computer from a client computer, comprising:

receiving a request for an exchange of data from the client computer;

defining an executable script within a source code, the executable script operating in response to a client computer input and rendering a data input screen inaccessible to prevent duplicative processing of a subsequent input from the client computer during the operation of the executable script, the input screen being rendered accessible in response to completion of the operation of the executable script; and

providing the source code that defines the data input screen;

wherein defining further comprises:

associating the executable script with a predetermined z-index number for a web page; and

rendering inaccessible those data entry elements associated with the web page that have a z-index number lower than the predetermined z-index number.

16. (Previously Presented) The method as recited in claim 15, wherein the source code comprises a tag-based language.

17. (Previously Presented) The method as recited in claim 16, wherein the source code defines a membrane layer at a higher z-index number than other Web page elements, executing the executable script further comprises changing a visibility attribute of the membrane layer.

18. (Previously Presented) A method for preventing data entry to a web page comprising:
 - associating an executable script with the web page;
 - permitting a first data input to the web page;
 - executing, in response to the first data input, the executable script; and
 - preventing data entry to at least a portion of the web page after execution of the script to prevent duplicative processing of the first data input and a second data input, wherein preventing further comprises:
 - associating the executable script with a predetermined z-index number for the web page; and
 - rendering inaccessible those data entry elements associated with the web page that have a z-index number lower than the predetermined z-index number,
 - wherein upon completion of the execution of the script, the data entry elements associated with the web page are rendered accessible.

19. – 23. (Canceled)

24. (Previously Presented) A method for preventing data entry to a web page comprising:
associating an executable script with the web page;
determining if the web page used z-index numbers;
permitting a first data input to the web page;
executing, in response to the first data input, the executable script; and
preventing data entry to at least a portion of the web page after execution of the script to
prevent duplicative processing of the first data input and a second data input, wherein
preventing further comprises:

associating the executable script with a predetermined z-index number for the
web page if the web page supports using the z-index number;

associating the executable script with a division of the web page if the web page
does not support using the z-index number;

rendering inaccessible those data entry elements associated with the web page
by rendering the division of the web page visible over the data entry elements if the web page
does not support using the z-index number; and

rendering inaccessible those data entry elements associated with the web page
that have a z-index number lower than the predetermined z-index number if the web page
supports using the z-index number,

wherein upon completion of the execution of the script, the data entry elements
associated with the web page are rendered accessible.

25. (New) The method of claim 3, wherein the membrane is defined such that the
membrane is initially hidden and is positioned and sized such that the membrane covers the
entire web page.